

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-8. (canceled).

9. (currently amended): A method for producing a thin film laminated with a single particle layer, comprising the steps of:

(a) providing a fine particle-containing liquid onto a support having a surface where a hydrophilic graft polymer chain is present; and

(b) allowing fine particles, ~~which do not interact with a hydrophilic functional group of the graft polymer,~~ to two-dimensionally aggregate while controlling development thickness of the fine particle-containing liquid, thereby forming a single particle layer;

wherein the fine particles have a diameter in a range from 0.1 nm to 20 μm ; and

wherein the fine particles do not interact with a hydrophilic functional group of the graft polymer such that the movement of the particles is not hindered.

10. (previously presented): A method for producing a thin film laminated with a single particle layer of claim 9, wherein the step (a) of providing a fine particle-containing liquid onto the support includes a step of providing the fine particle-containing liquid onto the support in such a manner that an amount of wet coating during the provision of the liquid becomes 0.1 to 100 g/cm^2 .

11. (original): A method for producing a thin film laminated with a single particle layer of claim 9, wherein the step (b) of forming a single particle layer includes a step of drying the

liquid film formed in the step (a) at a drying temperature of 180°C or below and a drying duration of 10 seconds to 10 hours.

12. (currently amended): A method for producing a thin film laminated with a single particle layer, comprising the steps of:

(a) forming a hydrophilic layer having a hydrophilic graft polymer chain on a surface thereof on a base member;

(b) providing a fine particle-containing liquid on the surface of the hydrophilic layer; and

(c) allowing fine particles, ~~which do not interact with a hydrophilic functional group of the graft polymer,~~ to two-dimensionally aggregate while controlling development thickness of the fine particle-containing liquid, thereby forming a single particle layer;

wherein the fine particles have a diameter in a range from 0.1 nm to 20 μm; and

wherein the fine particles do not interact with a hydrophilic functional group of the graft polymer such that the movement of the particles is not hindered.

13. (original): A method for producing a thin film laminated with a single particle layer of claim 12, wherein the step (a) of forming a hydrophilic layer includes one of a step of adhering the base member and a graft polymer by chemical bonding and a step of forming a graft polymer on the base member by polymerizing a compound having a double bond capable of being polymerized by using the base member as a starting point.

14. (original): A method for producing a thin film laminated with a single particle layer of claim 12, wherein the step (a) of forming a hydrophilic layer includes a step of forming a graft polymer, and cross-linking the graft polymer on the base member and also bonding the graft polymer with the base member.

15. (canceled).

16. (currently amended): A method for producing a thin film laminated with a single particle pattern layer, comprising the steps of:

(a) providing a fine particle-containing liquid onto a support having a surface where a hydrophilic graft polymer chain of patterned configuration is present; and

(b) allowing fine particles, ~~which do not interact with a hydrophilic functional group of the graft polymer,~~ to two-dimensionally aggregate while controlling development thickness of the fine particle-containing liquid, thereby forming a single particle layer in a region where the hydrophilic graft polymer chain is present;

wherein the fine particles have a diameter in a range from 0.1 nm to 20 μ m; and

wherein the fine particles do not interact with a hydrophilic functional group of the graft polymer such that the movement of the particles is not hindered.

17-19. (canceled).

20. (currently amended): A method for producing an optical film, comprising the steps of:

(a) providing a liquid containing light transmissive fine particles onto a light transmissive support having a surface where a hydrophilic graft polymer chain is present;

(b) allowing the light transmissive fine particles, ~~which do not interact with a hydrophilic functional group of the graft polymer,~~ to two-dimensionally aggregate while controlling development thickness of the liquid containing light transmissive fine particles, thereby forming a single particle layer; and

(c) providing a light transmissive resin layer on the single particle layer;

wherein the fine particles have a diameter in a range from 0.1 nm to 20 μ m; and

wherein the fine particles do not interact with a hydrophilic functional group of the graft polymer such that the movement of the particles is not hindered.

21. (original): A method for producing an optical film of claim 20, wherein the step (a) of providing a liquid containing light transmissive fine particles onto a light transmissive support includes a step of providing the liquid containing light transmissive fine particles onto the light transmissive support in such a manner that an amount of wet coating during the provision of the liquid becomes 0.1 to 100 g/cm².

22. (original): A method for producing an optical film of claim 20, wherein the step (b) of forming a single particle layer includes a step of drying the liquid film formed in the step (a) at a drying temperature of 180°C or below and a drying duration of 10 seconds to 10 hours.

23. (new): A method for producing a thin film laminated with a single particle layer of claim 9, wherein the fine particles have a diameter in a range from 5 nm to 5 μm.

24. (new): A method for producing a thin film laminated with a single particle layer of claim 12, wherein the hydrophilic layer having a hydrophilic graft polymer chain has a film thickness of 0.01 μm to 5 μm.

25. (new): A method for producing a thin film laminated with a single particle layer of claim 12, wherein the hydrophilic layer having a hydrophilic graft polymer chain has a film thickness of 0.1 μm to 2 μm.